Aviation Ocean Tracks and Supplements - v2

Domain Portfolio: Weather Imagery | Domain: Aviation | API Name:Aviation Ocean Tracks and Supplements - v2

Standard HTTP Cache-Control headers are used to define caching length. The TTL value is provided in the HTTP Header as an absolute time value using the “Expires” parameter. Example: “Expires: Fri, 12 Jul 2013 12:00:00 GMT”.

Geography: Global **Attribution Required:** NO **Attribution Requirements:** N/A

Overview

The Feature Data Service (FDS) API provides geographic features for a number of products. The client can use these features to render a visual representation of data.

- FDS provides geometric vector data where each feature can be a set of points, a polygon or set of polygons, a linestring or set of linestrings, or any other valid GeoJSON type
- Each feature is described by a set of geographic coordinates and a set of properties.
- Each feature is uniquely identified by the *combination* of its product key, feature key and valid time; the valid time is used to assign the feature to a unique feature set.
- For additional details about FDS, please see the Weather Company Data | Data Visualization - Weather Imagery | Common Usage Guide

Using FDS products requires a multi-step workflow to retrieve the necessary data for the specific product data request. Step 2 requires the **‘time’** value parameter, found in the response from Step 1.

- **Step 1:** Get Product Info - Provides time-based labels for the feature sets that are currently available.
- **Step 2:** Get Features for a Single Tile - Provides all geographic features for a single tile, taken from a single feature set within a specific product.

URL Construction

Step 1: Get Product Info
Required Parameters: **productKey,** apiKey=**yourApiKey** || **Optional Parameters:** meta, max-times https://api.weather.com/v2/vector-api/products/**<productKey>**/info?**apiKey=yourApiKey**
The [**/products/{productKey}/info**] request provides the labels for the feature sets that are currently available. These labels are required as input for the subsequent [**/products/{productKey}/features**] request, and they are invoked in that request’s **‘time’** parameter.
https://api.weather.com/v2/vector-api/products/6004/info?meta=true&max-times=12&apiKey=yourApiKey
Step 2: Get Features for a Single Tile
Required Parameters: **productKey, time, lod, x, y,** apiKey=**yourApiKey** || **Optional Parameters:** declutter, tile-size https://api.weather.com/v2/vector-api/products/**<productKey>**/features?time=**<time>**&lod=**<lod>**&x=**<x>**&y=**<y>**&**apiKey=yourApiKey**
The [**/products/{productKey}/features**] request provides a set of features for a single tile, from a particular feature set within a particular product. Each feature contains a small set of key metadata properties, including its ID and valid time, which are required as input for any subsequent [**/products/{productKey}/feature-details**] request, as the **‘feature-id’** and **‘valid-time’** parameters.
https://api.weather.com/v2/vector-api/products/6004/features?time=1492016701805&lod=10&x=175&y=409&tile-size=256&apiKey=yourApiKey

Product Data Dictionary: 6004 - Aviation Ocean Tracks

The source of the data includes dynamic Organized Track System type NATs, PACOTs, and AUSOTs as well as semi-static airway routes for EPAC between the continental US and Hawaii. The product is an active state product such that the last transmission in obsoletes any previous issuance. The disappearance of a feature can be inferred as a cancellation or aging out of the prior feature. Recently aged out Oceanic Tracks are included for 6 hours past expiration.

The geometry contains the coordinates for the Main/Flex route. The end spokes are contained in the product for Oceanic Track Supplements.

The JSON data includes the following fields:

Field *Found in the GeoJSON response, in each feature's **properties** field*	**Description**
Valid_time	Unix Timestamp when the Oceanic Track was queried
Issued_by	ICAO ID of the station that disseminated the WMO bulletin
Issue_time	Timestamp in ISO-8601 format when the Track was issued from the source.
Track_type	Track type, e.g. NAT, PACOT, AUSOT or EPAC
track_id	ID for the Track
Track_direction	Direction of Travel, E(ast) or W(est)
geometry	GeoJSON LineString lat/lon coordinates.
Active_at	Timestamp in ISO-8601 format when the Track becomes active
Expire_at	Timestamp in ISO-8601 format when the Track is no longer active
Is_expired	Boolean denotes recently expired Track
Flight_levels	Array of Flight Levels defined for transit

Remarks	Track Remarks
Description	Description of Track Start/End Points
Navfixes	Array of Navfixes as defined in the Raw Track data
Resolved_navfixes	Array of Navfixes with airways expanded out such that there is a one-to-one correspondence with the geometry lat/lon points.
Data	Raw Bulletin Text

Product Data Dictionary: 6005 - Aviation Ocean Track Supplements

The source of the data includes dynamic Organized Track System type NATs, PACOTs, and AUSOTs. The product is an active state product such that the last transmission in obsoletes any previous issuance. The disappearance of a feature can be inferred as a cancellation or aging out of the prior feature. Recently aged out Oceanic Tracks are included for 6 hours past expiration.

The product includes the end spokes only and is intended to act as a supplement to the Oceanic Tracks product.

The JSON data includes the following fields:

Field *Found in the GeoJSON response, in each feature's **properties** field*	**Description**
Valid_time	Unix Timestamp when the Oceanic Track was queried
Track_type	Track type, e.g. NAT, PACOT, AUSOT
track_id	ID for the Track
Track_direction	Direction of Travel, E(ast) or W(est)
geometry	GeoJSON LineString lat/lon coordinates.

Active_at	Timestamp in ISO-8601 format when the Track becomes active
Expire_at	Timestamp in ISO-8601 format when the Track is no longer active
Is_expired	Boolean denotes recently expired Track
Suppl_type	Track supplement type, e.g. ENTRY or EXIT
Departing_icao_ids	Array of Departure ICAO IDs the track pertains to
Landing_icao_ids	Array of Arrival ICAO IDs the track pertains to
Navfixes	Array of Navfixes to supplement the main/flex route
Resolved_navfixes	Array of Navfixes with airways expanded out such that there is a one-to-one correspondence with the geometry lat/lon points.